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10/849,232

05/20/2004

Heng-Chung Wu

2019-0265PUS1

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08/24/2005

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EXAMINER

CHIEN, LUCY P

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/849,232

Applicant(s)

WU, HENG-CHUNG

Examiner

Lucy P. Chien

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-4,6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior Art of Record (Figure 1) in view of Guehler et al (US 20010010884).

Regarding Claim 1,2,

the Prior Art of Record (Figure 1) discloses a displaying module including an upper and lower transparent substrate, a liquid crystal layer formed between the upper and lower transparent substrate, a translucent reflecting layer formed between the liquid crystal layer and the lower transparent substrate, and a backlight module arranged below the displaying module and adjacent to the lower transparent substrate.

The Prior Art does not teach using an anti-reflection coat.

Guehler et al discloses the use of an anti-reflection coating (Page 4, [0038]) which is desirable to minimize formation of interference patterns due to multiple reflections from the imaged material. By having all these layers as disclosed the first transmission rate of an inner light that passes from the backlight module to the displaying module is increased, and a luminance of the liquid crystal display is improved.

It would have been obvious to one skilled in the art to modify the Prior Art of Record (Figure 1) liquid crystal display to include Guehler et al's anti-reflection coating motivated by the desire to minimize formation of interference patterns due to multiple reflections from the imaged material.

Regarding Claim 3,4,

In addition to the Prior Art of Record (Figure 1) and Guehler et al as disclosed above, Guehler et al discloses the anti-reflection layer is grown on the lower transparent substrate in a sputter deposition process. (Page 6, [0050]).

Whether you use the sputter or evaporation deposition method or any other method is well known to use to form the layers together.

It would have been obvious to one skilled in the art to modify the Prior Art of Record's (Figure 1) liquid crystal display to include Guehler et al's sputter deposition process or the evaporation deposition process to form the anti-reflection layer on the lower transparent substrate.

Regarding Claim 6,

In addition to the Prior Art of Record (Figure 1) and Guehler et al as disclosed above, Guehler et al discloses the anti-reflection layer is made of metallic materials (Page 6, [0050]).

It would have been obvious to one skilled in the art to modify the Prior Art of Record's (Figure 1) liquid crystal display to include Guehler et al's anti-reflection being made of a metallic compounds to improved electronic display that includes components selected to enhance display performance. (Abstract)

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Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior Art of Record (Figure 1) and of Guehler et al (US 20010010884) in view of Umemoto et al (US 20010030724).

The Prior Art of Record (Figure 1) and Guehler et al do not disclose the use of an adhesive layer to bond the two components together

Umemoto et al discloses (Page 3, [0028]) using adhesive layer to bond two components together.

It would have been obvious to one skilled in the art to modify the Prior Art of Record (Figure 1) liquid crystal display and Guehler et al's anti-reflection coating to include Umemoto et al's adhesive layer to bond the lower substrate with the anti-reflection layer.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy P. Chien whose telephone number is 571-272-8579. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lucy Chien
Examiner
Art Unit 2871
LC


ROBERT KIM
SUPERVISORY PATENT EXAMINER